Remarks

In the Office Action dated 11/15/2004 ("Office Action"), Claims 1-32 were rejected. Claims 1-3, 5, 10-11, 17, 19-20, and 22-23 were amended in the foregoing amendment, and the remaining Claims remain unchanged. In view of the amendments to the Claims and the arguments set forth below, it is respectfully submitted that all Claims are currently in condition for allowance, and a Notice of Allowance is respectfully requested.

Arguments

- 1. The Examiner states that it is noted that an application was filed in Japan on 8/29/02, but that Applicants have not filed a certified copy of such Application. In actuality, no such application was filed, and the reference on the Filing Receipt to this foreign application is an error on the part of the PTO. Applicants are in the process of obtaining a corrected filing receipt. The current Application claims priority to the provisionally-filed application that is identified in the first paragraph of the Application.
- 2. Claims 1, 5, and 10 are objected to because they include periods after the step identifiers. These Claims, as well as Claim 2, are amended above to remove this punctuation.
- 3. Claims 3-15, and 17-30 are rejection under 35 USC §112 second paragraph, as being indefinite. These Claims are amended as follows:
- a.) In Claim 3, the obtaining step and the comparing step, both of which are said to be indefinite, have been amended to "the step of obtaining the image" and "the step of comparing the image", respectively.

- b.) Claim 5 has been amended such that "the day of travel" is replaced with "a day of travel".
- c.) Claim 10 has been amended such that "the record" is replaced with "the stored identification indicia", which coincides with the language of Claim 9, as well as the language of Claim 10 lines 4-5. Additionally, "the collected identification indicia" is changed to "the unique identification indicia" as suggested by the Examiner.
- d.) In Claim 11, "the retrieving step" is replaced with "the retrieving of the stored identification indicia", the antecedent basis for which is found in Claim 10.
- e.) Claim 17 has been amended so that "the country of destination" is "a country of destination".
- f.) With respect to Claim 19, this Claim was intended to convey the notion that after the traveler has physically crossed a border into the country of destination, the traveler must now utilize an automated clearance process to allow the traveler to travel within that country. This Claim has been amended to clarify this intended meaning. In particular, the current language now recites that at the country of destination, an automated clearance process is used to allow the traveler to enter the country.
- g.) In Claim 20, "the automated checks" has been changed to "one or more automated checks".
- h.) In Claim 22, "the storing step" has been amended to "the step of storing the identification indicia".
- i.) In Claim 23, "the data processing" has been changed to "the data processing system".

With the changes to the Claims as set forth above, it is believed that Claims 3-15 and 17-30 meet the requirements of 35 USC §112, and it is requested that this rejection be withdrawn.

- 4. Claims 1, 2, and 5-22 are rejected under 35 USC §101 as being non-statutory. Claim 1 has been amended to recite that the method utilizes a data processing system for processing travelers. (Claim 1, lines 1 and 3.) The system is shown and described in Applicants' Figures, including Figure 1. With this change, the invention is believed to be within the technological arts, and it is requested that this rejection be withdrawn.
- 5. The Application currently names joint inventors. The Examiner's presumption regarding the ownership of the subject matter of the various Claims is correct.
- 6. Claims 1-32 are rejected under 35 USC 103(a) as being unpatentable over patent publication US 2002/0198731 to Barnes et al. (hereinafter, "Barnes") in view of U.S. Patent No. 6,085,976 to Sehr (hereinafter, "Sehr"). This rejection is respectfully traversed.

Before discussing this rejection in detail, Applicants' invention is summarized for discussion purposes. The invention relates to a mechanism for automating the procedures that are typically required to accomplish an international border crossing during travel. One of the most important procedures that are performed when a traveler seeks to cross an international border involves verifying the traveler's identity. This typically requires a manual step of reviewing a person's travel documents, then verifying that the document carrier is the person described by those papers. Visual inspection alone may be used for this purpose, as by comparing the appearance of the traveler with a passport photograph. If this initial comparison in inconclusive, the official

conducting the verification may request additional photo-identification documents such as a driver's license. In addition, the official may conduct an inquiry to ascertain nationality, employment and/or residence status, and so on, to verify the identification of the traveler.

The type of manual interview and/or inspection process discussed above is important for several reasons. First, because a passport photograph may be up to ten years old, an inspector may need to request additional information from the traveler, which may include a more recent photo. If doubts still exist about the identity of the document bearer, additional information may be obtained via the interview process. Additionally, a trained inspector may be able to determine whether documents are counterfeit, or if any other concerns exist regarding the status of the prospective traveler.

The type of manual process discussed above is time-consuming. However, this process cannot be practically replaced by automated document readers located, for example, within an airport terminal. This is because some mechanism is needed to ensure that the person currently possessing the documents is the same individual identified by those papers, thus preventing the use of lost or stolen documents by another person. Moreover, it may be noted that this type of verification process cannot be practically performed solely by automated means that obtains a photograph of a traveler, then compares that photograph to one contained in a passport. This is because a passport photograph, which may be as much as ten years old, will often not match the current appearance of the traveler, who may have changed in appearance considerably since the time the photograph was taken. Thus, an automated comparison between scanned photographs will produce an inordinate amount of false negatives, and in some cases, may even result in false positives. To prevent this, when systems for comparing multiple photographs are used to verify identity, some type of manual inspection means is also employed as the primary means of verification, particularly where international border crossings are concerned.

As may be appreciated from the foregoing discussion, some type of

manual screening process is necessary to verify identification of travelers crossing international borders. Generally, this process is performed on the day of travel, for example at a customs station. However, because the procedures may be time-consuming, this may significantly increase wait times. The current invention provides a mechanism that addresses these considerations. According to the invention, identification verification is performed before the day of travel. The prospective traveler proceeds to an enrollment office where an enrollment official performs a manual visual identification, and, if necessary, an interview. After the traveler's identity has been verified, unique identification indicia is collected from the user. This may involve collecting one or more biometric samples such as fingerprints, iris scans, facial scans, and the like. (Applicants' Specification page 5 lines 4-7.) This information is recorded along with other user information such as a passport photo. At this time, checks may be initiated to determine whether the individual poses any type of security or other risk. If not, the traveler is authorized to utilize a completely automated check-in process that does not require any human intervention.

According to this check-in process, on the day of travel, the user employs an automated kiosk that collects biometric data from the traveler, and compares this information against that previously stored by the enrollment officials. If a match occurs and the traveler has not been disqualified for automated processing because of any special conditions, the traveler is allowed to by-pass the manual screening process generally required for an international border crossing. This saves the traveler a significant amount of time, and allows resources to be concentrated on those travelers considered to statistically pose a higher security threat. (Specification page 7 line 17 through page 8 line 4.)

With the foregoing description available for discussion purposes, the language of Claim 1 is considered in detail. Claim 1 describes a method related to processing travelers that are crossing international borders. This process includes the steps of enrolling a traveler to utilize an automated check-in process prior to the time of travel. Then, at the time of travel, the traveler utilizes an automated check-in process to complete activities necessary to enable an

international border crossing.

The aspects of Claim 1 are said to be unpatentable over Barnes in view of Sehr. Barnes discloses a process whereby travelers approach a check-in counter on the day of travel and provide information such as a passport number, driver's license, or other personal identification. A photograph may also be acquired from the passenger, and biometric data such as a finger print or an iris scan may be obtained. (Barnes page 2, paragraph 0022 lines 13-16.)

Government officials then manually review this information to determine the type of processing that should occur at the in-bound country. (Barnes page 2, second column, first full paragraph.) Thus, the Barnes process is not automated, but requires manual intervention to perform the identification verification necessary to provide for an international border crossing.

The Examiner states that Barnes is relevant to the current invention because this reference teaches the act of buying a ticket prior to the day of travel, which is said to be analogous to enrolling a traveler in a travel system prior to travel. However, this Barnes "enrollment" process of buying a ticket does not have anything to do with teaching or suggesting Applicants' step of enrolling in an automated check-in process. As previously discussed, in Barnes, manual human intervention is required after the customer provides data on the day of travel. Thus, it is respectfully asserted that Barnes is only tangentially relevant to the claimed invention.

In regards to Sehr, the Examiner cites this reference as disclosing a procedure whereby the passengers enroll prior to check-in to obtain a smart card that carries information pertaining to international travel. This smart card is said to enable an automated check-in process.

Sehr disclosed a multi-application card such as a smart card that stores travel information as well as monetary value that can be used for electronic payment. Travel information may include the equivalent of an electronic ticket, use rights for a transportation carrier, considerations for travel-related services, security codes, and so on. During international travel, this type of card may be employed as follows:

"[t]he cardholder's identity can be verified at the passenger station by a carrier/travel representative, including via selected information stored in the passenger card....authorized personnel can also verify the picture imprinted onto the card, as well as the passenger's demographics information stored onto the card." (Column 23 lines 21-22 and 32-34, emphasis added.)

Thus, the Sehr system requires that a carrier representative manually perform identification verification. While Sehr does state that the system's control module can capture the passenger's physical appearance, which may then be compared to a picture stored on the card, this process is performed in addition to, rather than instead of, the manual verification process. (Column 23 lines 21-23 and line 32.) As noted above, security operations cannot rely solely on the type of verification process that compares a previously stored photo to a photo taken on the day of travel, since that type of process will generally produce a very large number of false negatives or positives, making this approach impractical.

Sehr also states that in addition to manual verification, the traveler may be required to provide a security code that will be matched to a code stored on the card. (Column 23 lines 38-41.) Again, this mechanism cannot be relied upon as the sole means of identification verification since code information can be lost or stolen along with the card, and would not be sufficiently protective to secure international borders. Thus, in Sehr, this additional check is only performed in addition to other manual procedures (Column 23 lines 21-23.)

To summarize, neither Sehr nor Barnes, alone or in combination, teach or suggest any mechanism that provides an automated check-in process for crossing an international border. Furthermore, these references do not suggest any means for enrolling a traveler in such a process prior to the time of travel. At most, if aspects of Sehr are combined with the Barnes system, a system is obtained wherein the Sehr smart card is used to provide a traveler's information to a computer on the day of travel so that this information can be used by government officials to manually verify a passenger's identity prior to a border

crossing.

For at least the foregoing reasons, it is respectfully submitted that Claim 1 is allowable over the current rejection, which should be withdrawn.

Claims 2-22 depend from Claim 1 and are allowable over the cited combination of references for at least the reasons discussed above in regards to Claim 1. These Claims include additional aspects not taught or suggested by the cited combination of references, as follows:

Claim 2 describes the enrollment step as including the steps of obtaining an image of a travel document, and then comparing this image to that on file with an enrollment official. The Examiner states that in Barnes, the ability to buy a ticket prior to the time of travel teaches Applicants' enrollment step. Therefore, it follows that some aspect of buying a ticket in Barnes must teach the steps of obtaining an image, then comparing that image to one on file with an enrollment official. However, nothing in Barnes describes the purchasing of a ticket as somehow being associated with these additional steps. For at least this reason, Barnes does not teach or suggest Applicants' Claim 2, and this Claim is patentable over the cited combination of references.

Claim 3 depends from Claims 1 and 2 and is allowable over the cited combination of references for at least the reasons cited in regards to Claim 2. Claim 3 further describes the pre-travel enrollment process as including a step of scanning a travel document, and then comparing the scanned imagine to an image on file with an enrollment official. The Examiner cites the description of Barnes Figure 4 as teaching this aspect of the invention. The cited Barnes description relates to an apparatus for processing passengers, baggage, and information concerning passengers and baggage in both the outbound and the inbound countries at the time of travel. This description does not have anything to do with an enrollment process performed prior to the time of travel for enabling automated check-in processing. Moreover, this description is completely unrelated to the Barnes ticket purchase process, which the Examiner asserts

teaches Applicants' enrollment process. Thus, the perceived relevance of the cited passage is not understood. This passage adds nothing that would suggest the limitation of Applicants' Claim 3, and this Claim is patentable over the cited combination of references.

Claim 4 depends from Claim 3 and is patentable over the cited combination of references for at least the reasons discussed in regards to Claim 3. Claim 4 further describes the type of travel documents that may be scanned during the pre-travel enrollment process. The Examiner cites Barnes paragraph 20 for teaching this aspect of the invention. The cited description involves the portion of the Barnes process that occurs at the time of travel in the country from which passengers are flying. This Barnes description has nothing whatsoever to do with any pre-travel enrollment process, or with the Barnes ticket purchase process, which the Examiner cites as teaching Applicants' enrollment process. For this additional reason, Claim 4 is allowable over this rejection.

Claim 5 depends from Claim 2, and is allowable over this rejection for the reasons discussed above in reference to Claim 2. Claim 5 further describes the enrollment process as collecting unique identification indicia from the traveler. The Examiner again cites Barnes paragraph 20 as teaching this aspect of the invention. As discussed in the foregoing paragraph, this paragraph has nothing to do with the Barnes ticket purchase process, which is said to suggest Applicants' enrollment process. For this additional reason, Claim 5 is allowable over this rejection.

Claims 6-9 depend directly or indirectly from Applicants' Claim 5, and describe additional aspects of Applicants' pre-travel enrollment process. The Examiner cites various passages in Barnes, including paragraphs 20, 21, and 27 as teaching the described aspects of Applicants' Claims. However, none of the cited aspects relate to any type of pre-travel enrollment process for enabling automated check-in, or to the Barnes ticket purchase process cited by the Examiner as teaching Applicants' enrollment process.

Claims 10 and 11 depend from Claim 9, and further describe the automated check-in process for enabling an international border crossing as

including the steps of collecting unique identification data (e.g., biometric readings) from the traveler, then automatically comparing this data to that stored during the enrollment process. Barnes Figures 2-4 are cited as suggesting this aspect of the invention. As previously stated, nothing in these Figures or the related description relates to storing unique identification during an enrollment process, which is said by the Examiner to be the Barnes ticket-purchasing process. Moreover, nothing in the description relates in any way to comparing indicia obtained during an automated check-in process to the enrollment data. Claims 10 and 11 are therefore patentable over the cited combination of references for this additional reason.

Claims 12-15 depend from Claim 10, and are patentable over the cited references for all of the reasons discussed in reference to Claim 10. These Claims further describe aspects concerning the automated check-in processing. As previously described, neither reference, alone or in combination, suggests use of an <u>automated</u> check-in process for crossing international borders. It follows that neither reference suggests the additional aspects of Applicants' invention.

Claims 16 and 17 depend from Claim 1 and are allowable for at least the reasons discussed in reference to Claim 1. Claim 17 further describes performing automated checks to determine whether the traveler poses a risk to the country of destination. The Examiner cites Barnes paragraph 20 as teaching this aspect. The cited passage describes that according to one embodiment, information provided by a passenger is forwarded to a governmental agent in the destination country, who then determines how a passenger is to be processed at the point of entry (Barnes paragraph 37). Upon arrival in the destination country, the traveler must consult an immigration official for instructions on how to proceed. (Barnes paragraph 38.) In an alternative embodiment, information from the governmental agent is transferred directly to the traveler so that the consultation with an immigration official is unnecessary. In either case, the Barnes process is not automated, but requires one or more instances of human intervention. For at least this additional reason, Claim 17 is patentable over the

cited combination of references.

Claim 18 depends from Claim 17 and is patentable over the cited references for at least the reasons discussed in regards to Claim 17. Claim 18 further describes the types of checks that may be automatically performed on the travelers during check-in. Barnes paragraphs 37-39 are cited as teaching these aspects of Claim 18. As described in reference to Claim 17, the cited passage describes a manual process involving one or more instances of human intervention, and therefore does not teach or suggest the aspects of Claim 18, which is patentable over the cited references.

Claim 19 depends from Claim 17 is patentable for at least the reasons discussed in regards to Claim 17. Claim 19 further describes an automated clearance process to allow entry to a destination country. Again, no <u>automated</u> process is disclosed in the cited paragraphs to teach or suggest Claim 19.

Claims 20 – 22 depend from Claim 19 and relates to performing automated checks which may enable the traveler to enter into a country of destination without undergoing a manual clearance process. For reasons previously discussed in regards to Claims 17-19, these Claims are not suggested by the cited passage in Barnes.

To summarize, it is respectfully submitted that Claims 1-22 are allowable over the current rejection, which should be withdrawn.

Turning next to independent system Claims 23 and 31, these Claims include aspects which are similar to those described above in reference to Claim 1. In particular, these Claims include a system to enroll a traveler to use an automated check-in procedure to cross an international border, and a system that provides an automated mechanism to allow this border crossing to be completed without human intervention. For reasons similar to those discussed above, these Claims are allowable over the cited references.

Dependent Claims 24-30 and 32 depend from independent Claims 23 and 31, respectively, and include aspects similar to those described in reference to dependent Claims 2-22. These Claims are likewise allowable over this rejection for reasons that are similar to those described in regards to those

Claims.

7. The prior art made of record and not relied upon has been reviewed and is considered to be of general interest only.

Conclusion

In the Office Action dated 11/15/2004, Claims 1-32 were rejected. Claims 1-3, 5, 10-11, 17, 19-20, and 22-23 were amended above, and the remaining Claims are unchanged. In view of the amendments to the Claims and the arguments set forth above, it is respectfully submitted that all Claims are currently in condition for allowance, and a Notice of Allowance is respectfully requested. If the Examiner has questions or concerns, a call to the undersigned is encouraged and welcomed.

Respectfully submitted,

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